CONTRA COSTA
WATER DISTRICT

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October 31, 2002

Paul Marshall
California Department of Water Resources
Bay-Delta Office
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Sacramento, CA 94236-0001

Dan Meier
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Subject: Scoping Comments on the South Delta Improvements Program

Dear Messrs. Marshall and Meier:

Contra Costa Water District (CCWD) has reviewed the September 11, 2002 Notice of Preparation (NOP) for the South Delta Improvements Program (SDIP) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) prepared by the California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR). CCWD also offered brief oral comments at the public scoping meeting held in Brentwood on October 9, 2002 and has participated in technical and policy meetings among stakeholders regarding the proposed project.

CCWD has been working with DWR, other CALFED agencies, and stakeholders to ensure that this CALFED SDIP project improves water quality or at least is water quality neutral when combined with other CALFED actions that will improve the drinking water quality for the more than 20 million Californians who divert or export water from the Delta. CCWD's interest is that the CALFED Program, including the SDIP when combined with the other CALFED projects, be consistent with the CALFED goal of continuous water quality improvement. CCWD will continue to work with DWR and CALFED to help meet these and other CALFED goals.

Specifically, CCWD is coordinating with CALFED and DWR on the management of the CALFED Rock Slough and Old River Drainage Management Projects. The goal of these projects is to reduce or eliminate the water quality impacts of local drainage near CCWD's drinking water intakes. CCWD believes the water quality benefits associated with the CALFED Rock Slough and Old River Drainage Management Projects can and should be credited towards the implementation of the SDIP, consistent with the August 2000 CALFED Record of Decision.

The proposed SDIP project will increase the maximum allowable diversion capacity at Clifton Court Forebay to 8,500 cubic feet per second (cfs). As part of the project, operational barriers will be installed and operated in South Delta channels to improve water levels, increase circulation, and keep fish in the main channels. The project also involves dredging in portions of Old River and West Canal as well as local channels to improve conveyance and reduce the frequency of barrier operations.

CCWD has submitted detailed comments on earlier versions of the proposed project, including the *Interim South Delta Program* (Walter J. Bishop, CCWD, to Stephen Roberts, DWR, Alan R. Candlish (USBR), and Dorothy F. Klasse ACOE, letter dated January 31, 1997), the *South Delta Water Management Program* (Ed Seegmiller, CCWD to Fred Bachman, DWR and Douglas Kleinsmith, USBR, letter dated September 27, 1991), and the *Temporary Barriers Project* (Walter J. Bishop, CCWD, to Karen Schagger, ACOE and Curt Schmutte, DWR, letter dated April 19, 1996). CCWD asks that all of CCWD's earlier comments on South Delta barriers and increased Banks pumping be incorporated by reference into the record for the current proposed project.

Elements of the SDIP, including operational permanent barriers in the South Delta and additional export pumping of up to 8,500 cfs at the Banks Pumping Plant, have the potential to increase the salt concentration of Delta water for CCWD and other municipal and industrial (M&I) users of Delta water, including Metropolitan Water District of Southern California, Alameda County Water District, Zone 7 Water Agency (State Water Contractors), and Santa Clara Valley Water District (a State Water Project and Central Valley Project contractor). Previous EIR/EISs, such as the 1996 Interim South Delta Program Draft EIR/EIS, indicated that the chloride concentrations at CCWD's intake on Old River could more than double at times because of the barrier operations and resulting State Water Project (SWP) and Central Valley Project (CVP) operations.

Degradation of water quality in the Delta can negatively impact CCWD's water supply and CCWD's ability to fill its $450 million Los Vaqueros Reservoir. When Delta water quality is degraded, the water diverted by CCWD for the 450,000 people that rely on CCWD for their water supply is impacted (a description of CCWD's facilities and operations is included as Appendix A). These impacts can be far-reaching, affecting CCWD's infrastructure and customers' systems. In addition, degradation of Delta water quality can also require CCWD to release more water from Los Vaqueros Reservoir to offset the poorer Delta water quality at CCWD intakes. This adversely impacts CCWD's water quality and water supply reliability and harms CCWD and its customers financially.

As discussed above, CCWD will continue to work with DWR and other CALFED stakeholders to ensure that the SDIP project improves water quality or is at least water quality neutral and, when combined with other CALFED actions, is consistent with the CALFED goal of continuous water quality improvement.

Technical Water Supply and Water Quality Analyses – CCWD requests that the analyses of the water supply operations and water quality impacts in the EIR/EIS be sufficiently detailed to

allow disclosure of the range of water quality improvements and degradation throughout the year for different water year types. Some analyses should also be done of different operations of the barriers within a 25-hour tidal cycle (e.g., closing barriers only on certain phases of the tide) so that the benefits of tidally-operating the barriers to meet CALFED's water quality goals and local agricultural supply needs can be determined. Care must also be taken in selecting appropriate significance criteria for the environmental analyses. Without appropriate significance thresholds it will not be possible to determine whether the CALFED Bay-Delta Program goals are being met. The technical analyses that CCWD requests be included in SDIP EIR/EIS are discussed in more detail in Attachment B.

Local Impacts of Dredging – The NOP indicates the SDIP may include dredging in portions of Old River to improve conveyance. CCWD requests that the EIR/EIS include a detailed description of potential dredge sites and frequency. If dredging in Old River in the vicinity of CCWD's intake is deemed to be necessary, the EIR/EIS should evaluate the short-term local impacts of dredging near a drinking water intake as well as the potential impacts on levee stability.

The environmental analyses described above will be necessary for each of the alternatives in order to make a comprehensive assessment of the water quality situation in the South Delta as CALFED implements Stage 1.

CCWD looks forward to continuing to work with DWR and USBR on the SDIP. Please direct any questions to Samantha Salvia at (925) 688-8057.

Sincerely,

Richard A. Denton
Water Resources Manager

SAS/rlr

Attachments
A: *CCWD Operations and Facilities*
B: Analyses that should be included in SDIP EIR/EIS

Attachment A

CCWD OPERATIONS AND FACILITIES

The Contra Costa Water District ("CCWD") serves approximately 450,000 people throughout central and eastern Contra Costa County. Its customers also include 9 major industries, 36 smaller industries and businesses, and 50 agricultural users. The mission of the Contra Costa Water District is to strategically provide a reliable supply of high quality water at the lowest cost possible, in an environmentally responsible manner.

CCWD operates raw water distribution facilities, water treatment plants, and treated water distribution facilities. CCWD supplies raw and treated water to Antioch, Clayton, Concord, Diablo Water District (serving Oakley), Pittsburg, Southern California Water Company (serving Bay Point), Martinez, and parts of Brentwood, Pleasant Hill and Walnut Creek.

The treated water service area for CCWD encompasses all or part of the cities of Concord, Clayton, Clyde, Pleasant Hill, Walnut Creek, Martinez, and Port Costa. Treated water for this service area is provided from the District's Bollman Water Treatment Plant in Concord. The Bollman facility is a 75 MGD conventional plant recently upgraded to include ozonation. CCWD also supplies treated water to the Diablo Water District ("DWD"), which serves customers in Oakley from the Randall-Bold Water Treatment Plant, jointly owned by CCWD and DWD. That plant is a 40 MGD direct/deep-bed filtration plant and utilizes both pre- and post-ozonation to provide a high quality drinking water to the customers in its service area.

CCWD is dependent on the Delta for its water supply. The Contra Costa Canal and the Los Vaqueros Project (completed in 1998) make up CCWD's principal water supply and delivery system. CCWD diverts unregulated flows and regulated flows from storage releases from Shasta, Folsom, and Clair Engle reservoirs into the Sacramento River as a contractor of the United States Bureau of Reclamation's ("Reclamation") Central Valley Project ("CVP"). Under Water Service Contract I75r-3401 (amended) with Reclamation, CCWD can divert and re-divert up to 195,000 acre-feet annually ("AFA") of water from Rock Slough and the Old River intake. Currently, CCWD uses between 125,000 and 140,000 AFA. CCWD can also divert up to 26,780 AFA of water from Mallard Slough under its own water rights (Water Rights License No.3167 and Permit No.19856). Some CCWD customers have additional sources of water. The City of Antioch has a water rights permit to divert water from the lower San Joaquin River. Pittsburg, Brentwood, and DWD all have wells that can provide a portion of their needs.

CCWD has obtained its water supply from the Delta since 1940. Delta water is subject to large variations in salinity and mineral concentrations. The Delta is also vulnerable to many anthropogenic and natural sources of water quality degradation. Degradation in water quality is objectionable to many CCWD customers, costly to all residential and industrial users, and a health risk for some individuals. The most recent federal drinking water regulations implemented in December 1998 impose stringent limits on disinfection by-products in treated water, making it difficult to achieve the required pathogen inactivation while minimizing

disinfection by- product formation. Bromide and Total Organic Carbon (TOC) are the significant constituents in Delta water that affect CCWD's ability to meet disinfection by product standards. Currently, CCWD's primary means of ensuring that disinfection by-product standards are met in the treated water is to ensure that bromide and TOC levels in the source water from the Delta are maintained below certain levels. Chlorides are monitored as an indicator of bromide and TOC levels. CCWD watches chloride levels in the Delta and adjusts operations to meet water quality goals in the source water to keep chlorides at an acceptable level. Bromide and TOC are not the only constituents of concern. Pathogens, nutrients, and other constituents contribute to the challenges of meeting regulations for treated water using Delta water as the source.

Contra Costa Water District is committed to supplying its customers with the highest quality water practicable and providing all reasonable protection of the supply from any known or potential source of contamination. CCWD Resolution No. 88-45 states in part that:

> "CCWD is committed to reducing the concentration of sodium and chloride in the District's water, thereby reducing household and landscape irrigation concerns and industrial and manufacturing costs caused by the fluctuating sodium and chloride level of CCWD's Delta source...."

In May 1987, CCWD's Board of Directors adopted water quality objectives for water distributed within its service area. The acceptable concentration levels for sodium and chloride were established at 50 milligrams per liter (mg/l) and 65 mg/l, respectively. In 1988, the voter-constituents of CCWD approved the issuance of bonds to finance a $450 million water quality and reliability project known as the Los Vaqueros Project. The primary purposes of the Los Vaqueros Project are to improve the quality of water supplied to CCWD customers and minimize seasonal quality changes, and to improve the reliability of the emergency water supply available to CCWD. The Los Vaqueros Project consists of a reservoir with 100,000 acre-feet of storage, a new point of diversion at Old River, south of the Highway 4 crossing, which operates in conjunction with the current Rock Slough diversion point, plus associated water conveyance and delivery facilities, pumping plants, and other facilities.

On June 2, 1994, the State Water Resources Control Board issued Decision 1629 which gives CCWD additional rights to divert and store water for beneficial uses. The State Board subsequently issued Water Rights Permits No. 20749 and 20750 for filling Los Vaqueros Reservoir from the new intake at Old River and diversion and storage of the water of Kellogg Creek. These rights are in addition to the contractual rights to divert and store water furnished through the CVP. Construction of the reservoir began in September 1994 and was completed in January 1998. Diversion from the Old River intake for delivery to CCWD's service area began in the summer of 1997. On January 28, 1999, the first filling of Los Vaqueros Reservoir to 100,000 acre-feet was completed. Up to 95,850 AFA may be diverted for storage between November 1 of each year to June 30 of the succeeding year under Water Rights Permit No. 20749.

A key to successful performance of the Los Vaqueros Project is the District's ability to fill and continue to refill the reservoir from Old River with high quality water at times when it is available, typically late winter through early summer, and to use that water for blending when salinity at the District's Delta intakes exceeds the 65 mg/L chloride goal, generally late summer through early winter. Any increase in Delta salinity caused by new Bay-Delta projects will increase the demand on blending water from the reservoir and affect the availability of high quality water for refilling. The District and its 450,000 customers will be impacted through higher pumping costs to replace the extra blending water that is released and through the additional treatment costs, increased corrosion and health effects of delivering higher salinity water. This erodes the $450 million investment CCWD's customers have made in the Los Vaqueros Project.

Attachment B

Analyses that should be included in SDIP EIR/EIS

1. Provide detailed analysis of water supply operations and water quality impacts.

CCWD requests that the EIR/EIS analyze and discuss the impacts, if any, of the proposed project on drinking water quality for users of Delta water. Typically, water quality modeling results in EIR/EISs are presented as monthly-averages for the multi-year historical hydrologic sequences, with additional information regarding the maximum and minimum daily values and changes within each month. CCWD requests that the EIR/EIS for the SDIP include detailed tables and graphs of monthly Central Valley and Delta water supply operations as well as more detailed disclosure of monthly water quality changes in the Delta at the key M&I intakes (CCWD's intake at Pumping Plant #1 off Rock Slough, CCWD's intake at Old River near the Highway 4 crossing, Banks and Tracy), rather than just averages over 70 years. CCWD requests that the EIR/EIS disclose the water quality impacts and water supply operations at this level of detail for the historical hydrologic sequence.

This analysis will help determine how the Project operates to meet CALFED water quality goals and what might be necessary to ensure achievement of those goals.

2. Check that the operations model is meeting the Water Quality Control Plan requirements.

The detailed water quality analysis will also provide an important check whether the operations model used to simulate Central Valley and Delta operations (CALSIM II) is meeting all the required M&I and south Delta agriculture standards in the Water Quality Control Plan. If some of the standards are not being met in the without- or with-Project cases, or both, the water supply benefits of the Project may be over- or under-estimated.

3. Define and use appropriate significance thresholds for impacts to water quality.

CEQA guidelines define the term "significant effect on the environment" as a "substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance." More explicit definition and quantification of the term becomes a matter of determination on a case-by-case basis because the significance of an activity (project) may vary with setting.

Appropriate criteria should be developed for the evaluation of the SDIP taking into account the unique characteristics and regulatory setting of the Delta and should be used to analyze modeling results. See, for example, the EIR/EIS for the Los Vaqueros Project which contains an initial screening procedure to help identify Delta Water quality impacts and prescribes more detailed evaluations of water quality changes if certain screening criteria are met.

Without appropriate significance criteria it will not be possible to determine whether CALFED's goals are being met.

4. **Analyze water quality impacts of the barriers at a tidal timescale.**

   CCWD understands that the SDIP may include tidal operation of some or all of the permanent barriers. CCWD requests that the lead agencies model and disclose the effects of different operations of the barriers within 25-hour tidal cycles (e.g., closing barriers only on certain phases of the tide) and report the results as daily-averaged water quality changes for representative two- or three-year periods. CCWD understands that DWR's Delta hydrodynamic model, DSM2, has recently been updated to incorporate "real tide" simulations and will be used in evaluating water quality impacts.

5. **Consider local impacts of dredging, in particular effects of dredging adjacent to CCWD Old River intake.**

   The NOP indicates the SDIP may include dredging in portions of Old River to improve conveyance. CCWD requests that the EIR/EIS include a detailed description of potential dredge sites and frequency. If dredging in Old River in the vicinity of CCWD's intake is proposed, the EIR/EIS should evaluate the short-term local impacts of dredging near a drinking water intake.